

Ballast Water Management System
Purestream™

Atlantium's Purestream™ UV-Based BWMS Successfully Completes All Testing for IMO and USCG Type Approval

Atlantium Marine, a subsidiary of Atlantium Technologies, announces that it has successfully completed all testing for IMO and USCG type approval for its proprietary UV-based ballast water management system (BWMS), Purestream™ under the independent laboratory of Lloyds Register, and testing facility of NIVA and FORCE.

Built on nearly two decades of expertise in the global water disinfection and treatment market, Purestream BWMS was introduced in 2019 and shortly after, the innovative technology completed the land-based validation and the environmental testing in accordance with the IMO's BWMS Code and the USCG CFR 162.060.

In January 2020, the Purestream system entered the final shipboard testing phase of the validation process when it was installed onboard a 3,854 TEU container vessel — Zim Qingdao to acquire IMO and USCG type approval, which was completed in August.

Purestream, which is unmatched by any other technology with its continuous flow control and proprietary sensor technology, has completed several milestones that are a further testament to the technical efficacy of the system.

"We are excited to announce that the Purestream system has completed all testing for IMO and USCG type approval," said Atlantium CTO Ytzhak Rozenberg. "For the IMO and USCG, all testing was successfully completed on the first run. For the IMO, Purestream completed one-pass treatment for seawater and two-pass treatment for brackish and freshwater with UV transmittance (UVT) levels of 40% and above. For the USCG, Purestream was tested at 40% UVT; the lowest in the market."

Unlike other UV-based ballast water systems available on the market, Purestream is the only UV-based BWMS technology capable of treating seawater ballast to meet the BWDS with a single pass per the IMO. Atlantium's proprietary One-Pass™ approach requires operation of the technology only during ballasting, there are no requirements for operation during deballasting. This unique attribute of the technology reduces its overall power consumption by 50% when compared to traditional UV-based BWMS that must treat during the ballasting and deballasting steps to ensure a discharge effluent that is in regulatory compliance.

For the USCG, Purestream is the only UV-based technology to demonstrate its efficacy at the minimum retention time (≤ 24 -hours) at the lowest UVT of 40%. This ensures that ship owners and operators can benefit from effective and proven treatment of their total ballast capacity within 24 hours with such low UVT; reducing limitations on the ship's operation. This is the lowest validated UVT of any BWMS technology until today. This operational advantage reduces the risk of non-treatment to shipowners and provides them with a solution despite less than favorable water quality conditions.

"We would like to thank our partners for their continued support and contribution to our success and look forward to continuing our efforts to deliver economical and effective environmentally friendly solutions by leveraging the company's wealth of knowledge, expertise and technical know-how," said Atlantium CEO Yariv Abramovich.



Purestream™ UV-based ballast water management system assures compliance with the strictest inspection processes.